

since they would be least likely to reach the mouth from such location.

It may be added that *Gasterophilus* has no incubating uterus, but that the large ovaries are packed with eggs which come down a few at a time for deposition. The eggs of the above *nasalis* female show no incubation, and the chorion is transversely corrugated so that it holds on insertion in the skin. All the records of lip and muzzle oviposition of this species that I have seen state that the eggs are attached to the hairs. This might easily happen when the fly misses its mark, and no doubt it misses frequently, but the effort is evidently directed at the tender skin of the lips. The eggs are sticky when freshly extruded, and the fly may even, at times, inadvertently leave them on the hairs of the throat when caught by the convulsive movements of the intended host. This would explain throat oviposition records.

AN ANNOTATED LIST OF THE CERAMBYCIDÆ OF CALIFORNIA.

BY RICHARD T. GARNETT, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

(Continued from page 213.)

141. *Gaurotes cressoni* Bland.

Rare in Northern California. Several taken by Van Dyke in Marin County on flowers of the wild honeysuckle in April.

142. *Leptura obliterata* Hald.

Breeds in Douglas spruce, sapwood of redwood, and other coniferous trees. Found in the coast counties from Santa Cruz to the Oregon line.

143. *Leptura soror* LeConte.

Found throughout the Sierras at altitudes of 4,000-8,000 feet, usually on flowers of veratrin. Taken by author at Donner Lake and Tahoe Tavern, breeding in branches of *Pinus ponderosa*. July 1-21.

144. *Leptura propinqua* Bland.

Found north and in the higher Sierras on various flowers. Breeds in various coniferous trees. Taken by author at Donner Lake. July 10.

145. *Leptura kerniana* Fall.
Taken by Daggett on the Kern River.
146. *Leptura plagifera* LeConte.
Taken rarely in northern Sierras. Found especially on the eastern sides of the Cascades.
147. *Leptura rubida* LeConte.
Rare. Taken in Northern California, Coast belt to San Francisco, and in Sierras—a different colour phase in each section.
148. *Leptura subargentata* Kirby.
Common at Camp Meeker, Sonoma County.
var. *ruficeps* LeConte.
Found throughout the Sierras.
var. *rhodopus* LeConte.
Breeds in tan bark oak.
var. *similis* Kirby.
149. *Leptura molybdica* LeConte.
Fairly common throughout the State on various flowers. Taken by Fall at Pasadena on Ceanothus; by Van Dyke in Sierra County, and the middle and northern Sierras.
150. *Leptura læta* LeConte.
Found throughout the State; not abundant anywhere, most common in the foothills of the Sierras. Found by Van Dyke on flowers, especially those of California wild holly. Bred by Rivers from live oak. Taken by author at Donner Lake, July 12.
151. *Leptura tribalteata* LeConte.
Found in Northern California and Sierras as far south as Walker Basin. Taken by author at Donner Lake July 6 on meadow flowers.
152. *Leptura coquilletti* Fall.
Taken on flowers of *Eriogonum fasciculatum* in June by Ricksecker. Taken by Van Dyke in Sierra Madre Mts., San Bernardino Mts., and also Los Angeles County.

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153. *Leptura impura* LeConte.
Taken rarely in the redwood belt of Sonoma County. One specimen taken by Van Dyke in Siskiyou County. Supposed by Blaisdell to breed in the sapwood of redwood.
154. *Leptura instabilis* Hald.
Taken in moderate numbers in parts of Northern California and in Sierras. Rare in June on Pomona foothills. Taken by Van Dyke on lupine at Tahoe; by author at Donner Lake, July 3.
155. *Leptura sexmaculata* Linne.
Northern, barely running over into this State. Breeds in spruce.
156. *Leptura barberi* Fall.
Taken in Humboldt and Shasta Counties. Breeds in the Sitka spruce. Rather rare.
157. *Leptura vexatrix* Mannerheim.
Found on umbelliferous flowers, yarrow, etc., through the Sierras from Siskiyou County south to Calaveras County. This is considered by Van Dyke as a variety of *quadrillum* Lec.
158. *Leptura sexspilota* LeConte.
Taken abundantly in Southern California by Van Dyke in May and June on flowers of greasewood; also taken near Los Angeles on wild walnut. Taken at San Pedro Martir, Lower California.
159. *Leptura matthewsii* LeConte.
Never found on flowers, but resting on leaves. Found in the Coast belt from Marin County to the northern line. Has been bred from the sapwood of the redwood. June 27.
160. *Leptura grossa* LeConte.
Rare in the Sierras, on veratrin flowers. One taken by Van Dyke on stump of *Pinus ponderosa* in Yosemite Valley.
161. *Leptura brevicornis* LeConte.
Found rarely in the north and in the Sierras. Breeds in *Pinus ponderosa*. Taken by author at Donner Lake. July 7.

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162. *Leptura nigrella* Say.
No data.
163. *Leptura carbonata* LeConte.
Northern California.
164. *Leptura subcostata* Fall.
One specimen taken by Fall at Tahoe.
165. *Leptura dehiscens* LeConte.
Rare, in the Sierras; northern, one specimen taken by Van Dyke in Siskiyou County. Four taken from small limbs of *Pinus ponderosa* at Calistoga by author. May 28.
166. *Leptura sanguinea* LeConte.
Found in Northern California and throughout the Sierras on veratrin and other flowers. May 30-July 17.
167. *Leptura lætifica* LeConte.
Taken in Sierras and Northern California; common in places in Shasta Lake, and Sonoma Counties on flowers of *Eriogonum*, etc. May 25-June 19.
168. *Leptura pernigra* Linnell.
Taken in Sierras Madre Mts., Los Angeles County by Van Dyke.
169. *Leptura quadrillum* LeConte.
Found on yarrow, etc., in the northern part of the State.
170. *Leptura chrysocoma* Kirby.
Common in the Sierras and Northern California on veratrin, yarrow, and other flowers. Taken in large numbers at Donner Lake and Tahoe by the author in July. July 1-21.
171. *Leptura dolorosa* LeConte.
Found especially on the *Ceanothus* in Northern California and the Sierras; common in places.
172. *Leptura crassipes* LeConte.
Found throughout the State, common in the northern part, less common in the south. Taken by Fall in the San Bernardino Mts. Usually found on the flowers of the yarrow, ox-eyed daisy, etc. Bred from *Umbellularia californica* by Rivers and Van Dyke. Bred from *Eucalyptus globulus* by Van Dyke. Taken by author at Calistoga. May 21.

173. *Leptura behrensii* LeConte.
Rare Two specimens taken by Baumberger in Northern Sonoma Co.; type specimen from Mendocino Co.; one taken by Van Dyke in Humboldt County.
174. *Leptura scripta* LeConte.
Common on Coast belt from Marin County to northern line on flowers, especially Azalea, Rhododendron; rare in the various parts of the Sierras. June 9.
175. *Leptura gnathoides* LeConte.
Found in Sierras and Northern California. Rare. Taken in Placer County by Van Dyke on young trees of post cedar.
176. *Leptura valida* LeConte.
Found rarely from Shasta to the Southern Sierras. Breeds in pine. Taken by author at Donner Lake. July 18.
177. *Leptura insignis* Fall.
Taken by Fuchs and Fenyes at Monterey. Breeds in Monterey pine; remains also found in *Pinus muricata* at Inverness; a specimen was bred by Van Dyke from Douglas spruce branch of unknown locality.
178. *Leptura aspera* LeConte.
Northern, may possibly run over into California.
179. *Leptura cubitalis* LeConte.
This species, which looks like an *Acmaeops*, is fairly common in the middle part of California. It is found on wild rose, etc., in Sonoma, Napa, San Mateo, and Lake Counties. June 8-29.
180. *Ophistomis ventralis* Horn.
Taken at El Taste, Lower California.
181. *Strangularia delicata* LeConte.
Occasionally found in most parts of the State, but is more common in the north and middle Sierras on various flowers. June 3.

(To be continued)

Mailed July 10th, 1918.